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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,000	08/01/2003	Eilas Gedamu	200208658-1	8991
22879	7590	12/15/2004	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			TRAN, CHUC	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,000

Applicant(s)

GEDAMU ET AL.

Examiner

Chuc D Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7 and 9-19 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 8 is/are rejected.
- 7) ☐ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/1/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka (USP. 6,759,698).

Regarding claim 1, Tanaka disclose a system for automatically routing power in an integrated circuit, the system comprising:

- memory (20) for storing data defining a representation of an integrated circuit (1) having a power contact (11) (Fig. 2) (Col. 3, Line 52) and a power connection (8) (Fig. 2) (Col. 3, Line 45); and
- logic (3) configured to analyze the data (Col. 3, Line 16) and to automatically route power from the power connection (8) to the power contact (11) (Col. 4, Line 26).

Regarding claim 2, Tanaka disclose that the data defines a design block (7) of the integrated circuit (1) (Col. 3, Line 41), the design block comprising the power contact (11) (Fig. 2) (Col. 3, Line 52).

Regarding claim 8, Tanaka disclose a system for automatically routing power in an integrated circuit, the system comprising:

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- means (2) for storing data defining a representation of an integrated circuit (Col. 3, Line 2) having a power contact (11) (Fig. 2) (Col. 3, Line 45) and a power connection (8) (Fig. 2) (Col. 3, Line 52);
- means (3) for analyzing the data (Col. 3, Line 16); and
- means (4) for automatically routing power from the power connection to the power contact (Col. 5, Line 12).

Allowable Subject Matter

3. Claims 5-7 and 9-19 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Regarding claim 5, the reference of the Prior Art of record fails to teach or suggest the combinations of the limitations as set for in the claim: logic configured to extract from the dataset a first value indicative of a location of the design block and a second value indicative of a second location of one power contact and specifically comprising the logic configured to automatically design routing of power to the one power contact based upon the first value and the second value.

Regarding claims 6-7 are allowable for the reason given in the claim 5 because of their dependency status from the claim 5.

Regarding 9, the reference of the Prior Art of record fails to teach or suggest the combinations of the limitations as set for in the claim: a logic for analyzing the data to determine the location of a power connection and the power contact and specifically comprising the limitation of a logic for creating a representation of the power routing.

Regarding claim 10, the reference of the Prior Art of record fails to teach or suggest the

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combinations of the limitations as set for in the claim: a method comprising a step of extracting from a dataset comprising a plurality of values indicative of a design of an IC design block a first value indicative of a location of the design block and a second value indicative of a second location of a power contact within the design block.

Regarding claims 11-12 are allowable for the reason given in the claim 10 because of their dependency status from the claim 10.

Regarding claim 13, the reference of the Prior Art of record fails to teach or suggest the combinations of the limitations as set for in the claim: a method of analyzing the data to determine the location of the power connection and the power contact and specifically comprising the method of creating a representation of the power routing.

Regarding claims 14-19 are allowable for the reason given in the claim 13 because of their dependency status from the claim 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of relevant Prior Art

Prior Art Tawada (USP. 5,404,312) disclose automatic design system capable of designing a logic circuit as desired

Prior Art Tanaka et al (USP. 6,253,364) disclose automatic placement and routing device.

Prior Art Kozono (USP. 5,075,753) semiconductor integrated circuit device.

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Prior Art Tanaka (US 2003/0221175) disclose automatic placement and routing apparatus for designing.

Prior Art Shibata (USP. 5,168,342) disclose semiconductor integrated circuit device.

Prior Art Kaida (US 2004/0031010) disclose wire layout design apparatus and method for integrated circuit.


Prior Art Borgini et al (USP. H512) disclose automatic universal array.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Don Wong
Supervisory Patent Examiner
Technology Center 2800

TC
December 3, 2004